

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. *(Original)* A method of controlling an array of optical elements in a succession of cycles to alter their states according to respective ones of a series of input data sets, each cycle comprising a first step wherein selected elements only of an optically blank or uniform array are written as determined by a respective data set, and a second step wherein the selected elements are selectively erased to restore a blank array prior to another cycle.

2. *(Currently Amended)* A method according to claim 1 wherein the array of optical elements to which the method is applied comprises a corresponding array of addressable active elements, and an electrode spaced from said corresponding array, each optical element being defined between said spaced electrode and a corresponding active element, and wherein during the said first step the active elements of ~~said~~ a first set and the spaced electrode are operated to apply a first potential difference across the selected optical elements of the first set, and during the said second step the active elements of ~~said~~ a second set and the spaced electrode are operated to apply a second potential difference across the selected optical elements of the second set, the first and second potential differences having opposite signs.

3. (*Original*) A method according to claim 2 wherein said first and second potential differences have equal amplitudes.

4. (*Currently Amended*) A method according to claim 2 ~~or claim 3~~ wherein between the first and second said steps ~~the voltages~~ on the spaced electrode and the ~~voltage applied to~~ each element of the array are all shifted substantially simultaneously by the same amount and in the same direction relative to a reference voltage.

5. (*Currently Amended*) A method according to claim 1 wherein the array of optical elements to which the method is applied comprises a corresponding array of addressable active elements, and an electrode spaced from said corresponding array, each optical element being defined between said spaced electrode and a corresponding active element, and wherein between the first and second said steps ~~the voltages~~ on the spaced electrode and the ~~voltage applied to~~ each element of the array are all shifted substantially simultaneously by the same amount and in the same direction relative to a reference voltage.

6. (*Original*) A method according to claim 4 or claim 5 wherein said shift in voltage is applied to said spaced electrode only for substantially the duration of said second step.

7. (*Currently Amended*) A method according to ~~any preceding claim 1,~~ wherein between said first step and said second step is a step of simultaneously addressing all the optical elements of the array so as to impose zero potential difference thereacross.

8. (*Currently Amended*) A method according to ~~any one of claims 1 to 6~~claim 1, wherein between said first step and said second step is a step of simultaneously addressing all the optical elements of the array so as to impose a finite dc potential difference thereacross.

9. (*Currently Amended*) A method according to claim 7 ~~or claim 8~~ wherein the optical elements are capacitative and subsequent to said simultaneous addressing all the optical elements are rendered open circuit.

10. (*Currently Amended*) A method according to ~~any one of claims 1 to 6~~claim 1, wherein between said first step and said second step is a step of simultaneously addressing all the optical elements of the array so as to impose a finite ac potential difference thereacross.

11. (*Currently Amended*) A method of synthesising a multi-level image using a multiple or weighted bit plane technique in which each bit plane is written by a method as defined in ~~any preceding claim 1.~~

12. (*Currently Amended*) A method according to claim ~~12~~11 wherein the said method for writing each bit plane provides dc balancing.

13. (*Currently Amended*) An electro-optic arrangement comprising:
an array of electro-optic elements; and
control means responsive to a series of input data sets, the control means being arranged to respond to each data set so that starting with an optically blank or uniform array of elements in a first step, the selected elements are written as determined by the data set, and in a second step, the selected elements are selectively erased to revert to a blank array prior to writing elements as determined by a successive data set.

14. (*Original*) An arrangement according to claim 13 wherein said array of electro-optic elements is defined by corresponding pixel electrodes of an active backplane.

15. (*Original*) An arrangement according to claim 14 wherein said active backplane is a semiconductor backplane.

16. *(Original)* An arrangement according to any one of claims 13 to 15 wherein said electro-optic elements comprise liquid crystal material located between said pixel electrodes and a spaced electrode.

17. *(Original)* An arrangement according to claim 16 wherein said spaced electrode is a single electrode common to all said electro-optic elements.

18. *(Currently Amended)* An arrangement according to ~~any one of claims 13 to 17~~claim 13, wherein the electro-optic elements are bistable.

19. *(Currently Amended)* An arrangement according to ~~any one of claims 13 to 17~~claim 13, wherein the electro-optic elements are monostable with a finite relaxation time.

20. *(Currently Amended)* An arrangement according to ~~any one of claims 13 to 19~~claim 13, wherein said array comprises a plurality of mutually exclusive sets of said elements, means arranged to address said sets one at a time, and means for addressing more than one of said plurality of sets simultaneously.

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawing includes changes to Fig. 1. This sheet, which includes Fig. 1, replaces the original sheet including Fig. 1.